

English Version

## Gas-fired endothermic engine driven heat pumps - Part 4: Test methods

Pompes à chaleur à moteur endothermique alimenté  
au gaz - Partie 4 : Méthodes d'essai

Gasbefeuerte endothermische Motor-Wärmepumpen -  
Teil 4: Prüfverfahren

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 299.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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## **European foreword**

This document (prEN 16905-4:2022) has been prepared by Technical Committee CEN/TC 299 “Gas-fired sorption appliances, indirect fired sorption appliances, gas-fired endothermic engine heat pumps and domestic gas-fired washing and drying appliances”, the secretariat of which is held by UNI.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 16905-4:2017.

In comparison with the previous edition, the following technical modifications have been made:

- Editorial and technical changes throughout the draft and in Annex ZA, ZB in order to align the text to the Ecodesign Requirements of Commission Regulation (EU) No 813/2013;
- Addition of Annex ZC in order to align the text to the Ecodesign Requirements of Commission Regulation (EU) No 2016/2281.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, ZB or ZC, which is an integral part of this document.

## Introduction

The GEHP appliances having their condenser cooled by air and by the evaporation of external additional water are not covered by this document.

Single split and multisplit systems are covered by this document.

The GEHP appliances can have one or more primary or secondary functions.

This document specifies the requirements, test methods and test conditions concerning, in particular, the construction, safety, fitness for purpose, and rational use of energy, for the rating and performance calculation of air conditioners and heat pumps using either air, water or brine as heat transfer media, with gas-fired endothermic engine driven compressors when used for space heating, cooling and refrigeration, hereafter referred to as “GEHP appliance”.

EN 16905 comprises the following parts under the general title, Gas-fired endothermic engine driven heat pumps:

- Part 1: Terms and definitions;
- Part 2: Safety;
- Part 3: Tests conditions;
- Part 4: Tests methods;
- Part 5: Calculation of seasonal performances in heating and cooling mode.

prEN 16905-4:2022 has been prepared to address the essential requirements of the European Regulation (EU) 2016/426 relating to appliances burning gaseous fuels and repealing Directive 2009/142/EC (see prEN 16905-4:2022, Annex ZA).

EN 16905-1:2017, prEN 16905-2:2021, EN 16905-3:2017, prEN 16905-4:2022 and prEN 16905-5:2021 are linked to the Energy Related Products Directive (2009/125/EC) in terms of tests conditions, tests methods and seasonal performances calculation methods under Mandate M/535; (see EN 16905- 3:2017, Annex ZA, prEN 16905-4:2022, Annex ZA, prEN 16905-5:2021, Annex ZA and prEN 16905-2:2021, Annexes ZB and ZC).

These documents will be reviewed whenever new mandates could apply.